ABSTRACT OF THE INVENTION

The present invention provides for a system and method for facilitating cooling of a totally enclosed motor. A first thermal barrier is coupled to a first end bracket and is operable to insulate bearings from internal heat produced by the motor. Either an external fan located opposite the drive end of the motor, an externally mounted blower, or free ambient air convection may be employed to provide cooling air to the motor. An air deflector is coupled to the drive end of the motor to capture the cooling air and direct it as high velocity air over the first end bracket thereby keeping the bearings supported within the first end bracket cool. Alternatively, an external fan may be coupled to the drive end of the motor to provide cooling air to the first end bracket.